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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
D AGOSTA, STEPHEN M	

ART UNIT	PAPER NUMBER
2683	13

DATE MAILED: 12/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/648,908	SHUPE ET AL.	
	Examiner	Art Unit	
	Stephen M. D'Agosta	2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claim1-25 have been considered but are moot in view of the new ground(s) of rejection.

1. New art has been cited which addresses the point of the HLR automatically updating the MSC without prompting from MSC.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-2, 4-6, 8-11 and 18-24 rejected under 35 U.S.C. 103(a) as being unpatentable over Sonti in view of Sanchez US 6,449,479 (hereafter Sonti and Sanchez).

As per **claim 1-2, 4-6, 8 and 23**, Sonti teaches a wireless communications system including a Service Location Register, Switching Center and a subscriber (figure 1) the subscriber having at least one profile associated with the subscriber (abstract and figures 2-4), a method of automatically updating the Switching Center with a change in the subscriber's profile comprising:

Receiving an update at a database regarding a change in the subscriber's profile

generating a request to the Service Location Register to send a profile update for the subscriber to a Switching Center (C8, L25-67, specifically L57-60 which states that the HLR sends any/all valid profile updates to the MSC without MSC intervention). **But is silent on** in response to the request and without any prompting by the MSC.

Sanchez teaches updating a subscriber's features via an HLR only and with no prompting from a switching center (abstract) -- Once the selection process is complete, a FEATREQ message 400 is sent from the pilot node 100 to the HLR 80. The appropriate change data FEATREQ flag is set within the FEATREQ message to allow updating the service feature(s) requested, while preventing other changes to the profile that would normally occur if the flag was not set, such as location update, fraudulent activity detection, and/or authentication. Of course, if an AMS 20 (i.e., the telephone assigned to the profile) is used through the PSTN or pilot node 100 to request changes to the feature profile, all of the regular profiles features which are automatically updated generally by the network 9, or as a result of check and inquiries conducted by the HLR 80 (e.g., phone location, phone activity indicator, fraud detection, authentication, etc.), will be updated also, as is the case with the method illustrated in steps 200-310 (abstract and C8, L33-49).

It would have been obvious to one skilled in the art at the time of the invention to modify Sonti, such that MSC prompting is not required, to provide automatic updates to an MSC(s) when an update occurs.

As per **claim 2**, Sonti teaches and HLR (C8, L57-60).

As per **claim 4**, Sonti teaches an MSC (C8, L57-60).

As per **claim 5**, Sonti teaches a wireless communication system including an HLR, MSC and a plurality of subscribers (figure 1) each of the subscribers having at least one profile associated with the subscriber, a method of automatically updating the MSC with a change in the subscriber profile, comprising

Receiving an update at a database regarding a change in the subscriber profile

Initiating a stored procedure in a the database to generate a request to the HLR to send a Qualification Directive (QUALDIR) to the MSC ~~for the subscriber~~ the qualdir including an update to the subscriber profile,

Sending the QUALDIR message to the MSC. (C8, L25-67, specifically L57-60 which states that the HLR sends any/all valid profile updates to the MSC without MSC

intervention AND figure 7 shows a QUALDIR message w/profile between the MSC and HLR) ~~.~~

~~———~~**But is silent on** in response to the request and without any prompting from the MSC.

Sanchez teaches updating a subscriber's features via an HLR only and with no prompting from a switching center (abstract) -- Once the selection process is complete, a FEATREQ message 400 is sent from the pilot node 100 to the HLR 80. The appropriate change data FEATREQ flag is set within the FEATREQ message to allow updating the service feature(s) requested, while preventing other changes to the profile that would normally occur if the flag was not set, such as location update, fraudulent activity detection, and/or authentication. Of course, if an AMS 20 (i.e., the telephone assigned to the profile) is used through the PSTN or pilot node 100 to request changes to the feature profile, all of the regular profiles features which are automatically updated generally by the network 9, or as a result of check and inquiries conducted by the HLR 80 (e.g., phone location, phone activity indicator, fraud detection, authentication, etc.), will be updated also, as is the case with the method illustrated in steps 200-310 (abstract and C8, L33-49).

It would have been obvious to one skilled in the art at the time of the invention to modify Sonti, such that MSC prompting is not required, to provide automatic updates to an MSC(s) when an update occurs.

As per **claim 6**, Sonti teaches a wireless system having at least one subscriber with at least one profile, ~~including a Service Location Register (SLR), Switching Center and a subscriber~~ (figure 1), a system for automatically updating the Switching Center with a change in the subscriber's profile, the system comprising;

A database configured ~~in communication with the SLR, the database operative~~ to receive an update regarding a change in the subscriber's profile ~~and initiate a stored procedure~~ to generate a request ~~the SLR~~ to send a profile to the Switching Center ~~(C8, L25-67, specifically L57-60 which states that the HLR sends any/all valid profile updates to the MSC without MSC intervention).~~

A SLR in communication with the database and being configured to:

Receive the request to send the profile update to the MSC (C8, L25-67, specifically L57-60).

But is silent on In response to the request and without receiving any prompting from the MSC, send the profile update to the MSC

Sanchez teaches updating a subscriber's features via an HLR only and with no prompting from a switching center (abstract) -- Once the selection process is complete, a FEATREQ message 400 is sent from the pilot node 100 to the HLR 80. The appropriate change data FEATREQ flag is set within the FEATREQ message to allow updating the service feature(s) requested, while preventing other changes to the profile that would normally occur if the flag was not set, such as location update, fraudulent activity detection, and/or authentication. Of course, if an AMS 20 (i.e., the telephone assigned to the profile) is used through the PSTN or pilot node 100 to request changes to the feature profile, all of the regular profiles features which are automatically updated generally by the network 9, or as a result of check and inquiries conducted by the HLR 80 (e.g., phone location, phone activity indicator, fraud detection, authentication, etc.), will be updated also, as is the case with the method illustrated in steps 200-310 (abstract and C8, L33-49).

It would have been obvious to one skilled in the art at the time of the invention to modify Sonti, such that MSC prompting is not required, to provide automatic updates to an MSC(s) when an update occurs.

As per **claim 8**, Sonti teaches an MSC (C8, L57-60).

As per **claims 9, 11 and 20-22, 24**, Sonti teaches claim 6 **but is silent on** a Sybase database and a stored procedure.

The examiner interprets the MSC, HLR and/or VLR as hardware devices which contain database software to perform various functions and hence, the examiner takes ***official notice*** that commercially available database software used would include

Sybase, Oracle, SQL Server, etc. as well as databases providing the ability to initiate stored procedures as programmed by the user.

As per **claims 10 and 18-19**, Sonti teaches claim 6 wherein the request generated by the database is a ~~QUALDIR message~~ qualification directive (figure 7 shows a QUALDIR message w/profile between the MSC and HLR).

~~**Claims 3 and 7** rejected under 35 U.S.C. 103(a) as being unpatentable over Sonti in view of Gillespie US Patent 6,256,379 (hereafter Gillespie).~~**Claims 3 and 7** rejected under 35 U.S.C. 103(a) as being unpatentable over Sonti/Sanchez and further in view of Dougherty US 6,393,271 (hereafter Dougherty).

As per **claim 3**, Sonti teaches claim 1 and service registers **but is silent on** a WSLR.

Dougherty teaches a system/method for wireline-based registration of wireless device (title and abstract and figure 1, #24).

It would have been obvious to one skilled in the art at the time of the invention to modify Sonti, such that a WSLR is used, so that a WSLR can be used instead of (or in place) of a generic Service Location Register.

As per **claim 7**, Sonti teaches claim 6 and service registers **but is silent on** a WSLR.

Dougherty teaches a system/method for wireline-based registration of wireless device (title and abstract and figure 1, #24).

It would have been obvious to one skilled in the art at the time of the invention to modify Sonti, such that a WSLR is used, so that a WSLR can be used instead of (or in place) of a generic Service Location Register.

Claims 12-14 and 25 rejected under 35 U.S.C. 103(a) as being unpatentable over Sonti/Sanchez and further in view of Chang et al. US 5,958,016 (hereafter Chang).

As per **claims 12-14 and 25**, Sonti **is silent on** use of Web/Internet.

Chang teaches use of Web/Internet to allow subscriber profile changes and for subscriber access to billing, profiles, etc. (title, abstract, figures 1-2 and C2, L7-67 and C4, L45-58 - The control data input by the subscribers may control services facilitated through high level network control points. In an intelligent network implementation of a telephone network, for example, the control data is used to establish or modify call processing records stored in a service control point. The control data also may be used to modify individual subscriber profiles in central office switching systems of the telephone network.).

It would have been obvious to one skilled in the art at the time of the invention to modify Sonti , such that Web/Internet access can be used, to provide ubiquitous access to anyone wishing to view their account AND/OR for allowing customer service to be remotely located from the MSC/HLR/Servers.

Claims 15-17 rejected under 35 U.S.C. 103(a) as being unpatentable over Sonti/Sanchez and further in view of Foti US 5,913,165 (hereafter Foti).

As per claims **15-17**, Sonti is silent on including at least one feature set.

Foti teaches changing service feature(s) [title].

Sanchez teaches updating a subscriber's features via an HLR only and with no prompting from a switching center (abstract) -- Once the selection process is complete, a FEATREQ message 400 is sent from the pilot node 100 to the HLR 80. The appropriate change data FEATREQ flag is set within the FEATREQ message to allow updating the service feature(s) requested, while preventing other changes to the profile that would normally occur if the flag was not set, such as location update, fraudulent activity detection, and/or authentication. Of course, if an AMS 20 (i.e., the telephone assigned to the profile) is used through the PSTN or pilot node 100 to request changes to the feature profile, all of the regular profiles features which are automatically updated generally by the network 9, or as a result of check and inquiries conducted by the HLR 80 (e.g., phone location, phone activity indicator, fraud detection, authentication, etc.),

will be updated also, as is the case with the method illustrated in steps 200-310 (abstract and C8, L33-49).

It would have been obvious to one skilled in the art at the time of the invention to modify Sonti, such that service features are included, to provide means for automatically updating MSC profiles and service features.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 703-306-5426. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 703-308-5318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0377.

SMD
12-3-03

WILLIAM TROST
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